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TECH CENTER 1600/2900

JAN 02 2001

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/297,040

DATE: 12/13/2001

TIME: 13:54:44

Input Set : A:\2012 0390004 seq list.txt

Output Set: N:\CRF3\12132001\I297040.raw

P.S

ENTERED

5 <110> APPLICANT: Mose Larsen, Peter
 7 Fey, Stephen J
 9 Nerup, Jorn
 11 Karlsen, Allan
 13 Bjerre Christensen, Ulla
 15 Pociot, Flemming
 17 Andersen, Henrik U
 21 <120> TITLE OF INVENTION: Diabetes-Mediating Proteins and Therapeutic Uses Thereof
 25 <130> FILE REFERENCE: 2012.0390004
 29 <140> CURRENT APPLICATION NUMBER: US 09/297,040
 31 <141> CURRENT FILING DATE: 1999-07-21
 35 <150> PRIOR APPLICATION NUMBER: PCT/IB97/01627
 37 <151> PRIOR FILING DATE: 1997-10-24
 41 <150> PRIOR APPLICATION NUMBER: US 08/897,098
 43 <151> PRIOR FILING DATE: 1997-07-18
 47 <150> PRIOR APPLICATION NUMBER: US 60/029,324
 49 <151> PRIOR FILING DATE: 1996-10-25
 53 <150> PRIOR APPLICATION NUMBER: US 60/030,186
 55 <151> PRIOR FILING DATE: 1996-11-05
 59 <150> PRIOR APPLICATION NUMBER: US 60/030,088
 61 <151> PRIOR FILING DATE: 1996-11-05
 65 <160> NUMBER OF SEQ ID NOS: 10
 69 <170> SOFTWARE: PatentIn version 3.1
 73 <210> SEQ ID NO: 1
 75 <211> LENGTH: 668
 77 <212> TYPE: PRT
 79 <213> ORGANISM: Mus sp.
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 86 1 5 10 15
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 90 20 25 30
 93 Leu Ser His Glu Ala Phe Arg Phe Val Ser Arg Asp Tyr Ala Ser Glu
 94 35 40 45
 97 Ala Ile Lys Gly Ala Val Val Gly Ile Asp Leu Gly Thr Thr Asn Ser
 98 50 55 60
 101 Cys Val Ala Val Met Glu Gly Lys Gln Ala Lys Val Leu Glu Asn Ala
 102 65 70 75 80
 105 Glu Gly Ala Arg Thr Thr Pro Ser Val Val Ala Phe Thr Ala Asp Gly
 106 85 90 95
 109 Glu Arg Leu Val Met Pro Ala Lys Arg Gln Ala Val Thr Asn Pro Asn
 110 100 105 110
 113 Asn Thr Phe Tyr Ala Thr Lys Arg Leu Ile Gly Arg Arg Tyr Asp Asp
 114 115 120 125
 117 Pro Glu Val Gln Lys Asp Thr Lys Asn Val Pro Phe Lys Ile Val Arg
 118 130 135 140
 121 Ala Ser Asn Gly Asp Ala Trp Val Glu Ala His Gly Lys Tyr Ser Pro

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122 145          150          155          160
125 Ser Gln Ile Gly Ala Phe Val Leu Met Lys Met Lys Glu Thr Ala Glu
126          165          170          175
129 Asn Tyr Leu Gly His Thr Ala Lys Asn Ala Val Ile Thr Val Pro Ala
130          180          185          190
133 Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Gln Ile
134          195          200          205
137 Ser Gly Leu Asn Val Leu Val Ile Asn Glu Pro Thr Ala Ala Ala Leu
138          210          215          220
141 Ala Tyr Gly Leu Asp Lys Ser Glu Asp Lys Val Ile Ala Val Tyr Asp
142 225          230          235          240
145 Leu Gly Gly Gly Thr Phe Asp Ile Ser Ile Leu Glu Ile Gln Lys Gly
146          245          250          255
149 Val Phe Glu Val Lys Ser Thr Asn Gly Asp Thr Phe Leu Gly Gly Asp
150          260          265          270
153 Phe Asp Gln Ala Leu Leu Arg His Ile Val Lys Glu Phe Lys Arg Glu
154          275          280          285
157 Thr Gly Val Asp Leu Thr Lys Asp Asn Met Ala Leu Gln Arg Val Arg
158          290          295          300
161 Glu Ala Ala Glu Lys Ala Lys Cys Glu Leu Ser Ser Ser Val Gln Thr
162 305          310          315          320
165 Asp Ile Asn Leu Pro Tyr Leu Thr Asp Ala Ser Gly Pro Lys His Leu
166          325          330          335
169 Asn Met Lys Leu Thr Arg Ala Gln Phe Glu Gly Ile Val Thr Asp Leu
170          340          345          350
173 Ile Lys Arg Thr Ile Ala Pro Cys Gln Lys Ala Met Gln Asp Ala Glu
174          355          360          365
177 Val Ser Lys Ser Asp Ile Gly Glu Val Ile Leu Val Gly Gly Met Thr
178          370          375          380
181 Arg Pro Lys Val Gln Gln Thr Val Gln Asp Leu Phe Gly Arg Ala Pro
182 385          390          395          400
185 Ser Lys Ala Val Asn Pro Asp Glu Ala Val Ala Ile Gly Ala Ala Ile
186          405          410          415
189 Gln Gly Gly Val Leu Ala Gly Asp Val Thr Asp Val Leu Leu Leu Asp
190          420          425          430
193 Val Thr Pro Leu Ser Leu Gly Ile Glu Thr Gly Gly Val Phe Thr Lys
194          435          440          445
197 Leu Ile Asn Arg Asn Thr Thr Ile Pro Thr Lys Lys Ser Gln Val Phe
198          450          455          460
201 Ser Thr Ala Ala Asp Gly Gln Thr Gln Val Glu Ile Lys Val Cys Gln
202 465          470          475          480
205 Gly Glu Arg Glu Met Ala Gly Asp Asn Lys Leu Leu Gly Gln Phe Thr
206          485          490          495
209 Leu Ile Gly Pro Pro Ala Pro Arg Gly Val Pro Gln Ile Glu Val Thr
210          500          505          510
213 Phe Asp Ile Asp Ala Asn Gly Ile Val His Val Ser Ala Lys Asp Lys
214          515          520          525
217 Gly Thr Gly Arg Glu Gln Gln Ile Val Ile Gln Ser Ser Gly Gly Leu
218          530          535          540

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221 Ser Lys Asp Asp Ile Glu Asn Met Val Lys Asn Ala Lys Tyr Ala Glu
222 545 550 555 560
225 Glu Asp Arg Arg Lys Lys Glu Arg Val Glu Ala Val Asn Met Ala Glu
226 565 570 575
229 Gly Ile Ile His Asp Thr Glu Thr Lys Met Glu Glu Phe Lys Asp Gln
230 580 585 590
233 Leu Pro Ala Asp Glu Cys Asn Lys Leu Lys Glu Glu Ile Ser Lys Val
234 595 600 605
237 Arg Ala Leu Leu Ala Lys Asp Ser Glu Thr Gly Glu Asn Ile Arg Gln
238 610 615 620
241 Ala Ala Ser Ser Leu Gln Gln Ala Ser Leu Lys Leu Phe Glu Met Ala
242 625 630 635 640
245 Tyr Lys Lys Met Ala Ser Glu Arg Glu Gly Ser Gly Ser Ser Gly Thr
246 645 650 655
249 Gly Glu Gln Lys Glu Asp Gln Lys Glu Glu Lys Gln
250 660 665
253 <210> SEQ ID NO: 2
255 <211> LENGTH: 668
257 <212> TYPE: PRT
259 <213> ORGANISM: Homo sapiens
263 <400> SEQUENCE: 2
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266 1 5 10 15
269 Ala Ser Arg Gly Pro Thr Ala Ala Arg His Gln Asp Ser Trp Asn Gly
270 20 25 30
273 Leu Ser His Glu Ala Phe Arg Leu Val Ser Arg Asp Tyr Ala Ser Glu
274 35 40 45
277 Ala Ile Lys Gly Ala Val Val Gly Ile Asp Leu Gly Thr Thr Asn Ser
278 50 55 60
281 Cys Val Ala Val Met Glu Gly Lys Gln Ala Lys Val Leu Glu Asn Ala
282 65 70 75 80
285 Glu Gly Ala Arg Thr Thr Pro Ser Val Val Ala Phe Thr Ala Asp Gly
286 85 90 95
289 Glu Arg Leu Val Met Pro Ala Lys Arg Gln Ala Val Thr Asn Pro Asn
290 100 105 110
293 Asn Thr Phe Tyr Ala Thr Lys Arg Leu Ile Gly Arg Arg Tyr Asp Asp
294 115 120 125
297 Pro Glu Val Gln Lys Asp Ile Lys Asn Val Pro Phe Lys Ile Val Arg
298 130 135 140
301 Ala Ser Asn Gly Asp Ala Trp Val Glu Ala His Gly Lys Tyr Ser Pro
302 145 150 155 160
305 Ser Gln Ile Gly Ala Phe Val Leu Met Lys Met Lys Glu Thr Ala Glu
306 165 170 175
309 Asn Tyr Leu Gly His Thr Ala Lys Asn Ala Val Ile Thr Val Pro Ala
310 180 185 190
313 Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Gln Ile
314 195 200 205
317 Ser Gly Leu Asn Val Leu Val Ile Asn Glu Pro Thr Ala Ala Ala Leu
318 210 215 220

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321 Ala Tyr Gly Leu Asp Lys Ser Glu Asp Lys Val Ile Ala Val Tyr Asp
322 225                230                235                240
325 Leu Gly Gly Gly Thr Phe Asp Ile Ser Ile Leu Glu Ile Gln Lys Gly
326                245                250                255
329 Val Phe Glu Val Lys Ser Thr Asn Gly Asp Thr Phe Leu Gly Gly Asp
330                260                265                270
333 Phe Asp Gln Ala Leu Leu Arg His Ile Val Lys Glu Phe Lys Arg Glu
334                275                280                285
337 Thr Gly Val Asp Leu Thr Lys Asp Asn Met Ala Leu Gln Arg Val Arg
338                290                295                300
341 Glu Ala Ala Glu Lys Ala Lys Cys Glu Leu Ser Ser Ser Val Gln Thr
342 305                310                315                320
345 Asp Ile Asn Leu Pro Tyr Leu Thr Asp Ser Ser Gly Pro Lys His Leu
346                325                330                335
349 Asn Met Lys Leu Thr Arg Ala Gln Phe Glu Gly Ile Val Thr Asp Leu
350                340                345                350
353 Ile Arg Arg Thr Ile Ala Pro Cys Gln Lys Ala Met Gln Asp Ala Glu
354                355                360                365
357 Val Ser Lys Ser Asp Ile Gly Glu Val Ile Leu Val Gly Gly Met Thr
358                370                375                380
361 Arg Pro Lys Val Gln Gln Thr Val Gln Asp Leu Phe Gly Arg Ala Pro
362 385                390                395                400
365 Ser Lys Ala Val Asn Pro Asp Glu Ala Val Ala Ile Gly Ala Ala Ile
366                405                410                415
369 Gln Gly Gly Val Leu Ala Gly Asp Val Thr Asp Val Leu Leu Leu Asp
370                420                425                430
373 Val Thr Pro Leu Ser Leu Gly Ile Glu Thr Gly Gly Val Phe Thr Lys
374                435                440                445
377 Leu Ile Asn Arg Asn Thr Thr Ile Pro Thr Lys Lys Ser Gln Val Phe
378                450                455                460
381 Ser Thr Ala Ala Asp Gly Gln Thr Gln Val Glu Ile Lys Val Cys Gln
382 465                470                475                480
385 Gly Glu Arg Glu Met Ala Gly Asp Asn Lys Leu Leu Gly Gln Phe Thr
386                485                490                495
389 Leu Ile Gly Pro Pro Ala Pro Arg Gly Val Pro Gln Ile Glu Val Thr
390                500                505                510
393 Phe Asp Ile Asp Ala Asn Gly Ile Val His Val Ser Ala Lys Asp Lys
394                515                520                525
397 Gly Thr Arg Arg Glu Gln Gln Ile Val Ile Gln Ser Ser Gly Gly Leu
398                530                535                540
401 Ser Lys Asp Asp Ile Glu Asn Met Val Lys Asn Ala Lys Tyr Ala Glu
402 545                550                555                560
405 Glu Asp Arg Arg Lys Lys Glu Arg Val Glu Ala Val Asn Met Ala Glu
406                565                570                575
409 Gly Ile Ile His Asp Thr Glu Thr Lys Met Glu Glu Phe Lys Asp Gln
410                580                585                590
413 Leu Pro Ala Asp Glu Cys Asn Lys Leu Lys Glu Glu Ile Ser Lys Met
414                595                600                605
417 Arg Glu Leu Leu Ala Lys Asp Ser Glu Thr Gly Glu Asn Ile Arg Gln

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418      610      615      620
421 Ala Ala Ser Ser Leu Gln Gln Ala Ser Leu Lys Leu Phe Glu Met Ala
422 625      630      635      640
425 Tyr Lys Lys Met Ala Ser Glu Arg Glu Gly Ser Gly Ser Ser Gly Thr
426      645      650      655
429 Gly Glu Gln Lys Glu Asp Gln Lys Glu Glu Lys Gln
430      660      665
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435 <211> LENGTH: 258
437 <212> TYPE: PRT
439 <213> ORGANISM: Rattus sp.
443 <400> SEQUENCE: 3
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446 1      5      10      15
449 Pro Asn Pro Arg Gly Trp Pro Gly Ala Trp Gly Asn Gln Pro Gly Ala
450      20      25      30
453 Gly Gly Tyr Pro Gly Ala Ser Tyr Pro Gly Ala Pro Gly Gln Ala Pro
454      35      40      45
457 Pro Gly Gly Tyr Pro Gly Gln Ala Pro Pro Ser Ala Tyr Pro Gly Pro
458      50      55      60
461 Thr Gly Pro Ser Ala Tyr Pro Gly Pro Thr Ala Pro Gly Ala Tyr Pro
462 65      70      75      80
465 Gly Pro Thr Ala Pro Gly Ala Phe Pro Gly Gln Pro Gly Gly Pro Gly
466      85      90      95
469 Ala Tyr Pro Ser Pro Gly Ala Tyr Pro Ser Ala Pro Gly Ala Tyr Pro
470      100     105     110
473 Ala Thr Gly Pro Phe Gly Ala Pro Thr Gly Pro Leu Thr Val Pro Tyr
474      115     120     125
477 Asp Met Pro Leu Pro Gly Gly Val Met Pro Arg Met Leu Ile Thr Ile
478      130     135     140
481 Ile Gly Thr Val Lys Pro Asn Ala Asn Ser Ile Thr Leu Phe Lys Lys
482 145     150     155     160
485 Gly Asn Asp Ile Ala Phe His Phe Asn Pro Arg Phe Asn Glu Asn Asn
486      165     170     175
489 Arg Arg Val Ile Val Cys Asn Thr Lys Gln Asp Asn Asn Trp Gly Arg
490      180     185     190
493 Glu Glu Arg Gln Ser Ala Phe Pro Phe Glu Ser Gly Lys Pro Phe Lys
494      195     200     205
497 Ile Gln Val Leu Val Glu Asp His Phe Lys Val Ala Val Asn Asp Val
498      210     215     220
501 His Leu Leu Gln Tyr Asn His Arg Met Lys Asn Leu Arg Glu Ile Ser
502 225     230     235     240
505 Gln Leu Gly Ile Ile Gly Asp Ile Thr Leu Thr Ser Ala Ser His Ala
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509 Met Ile
513 <210> SEQ ID NO: 4
515 <211> LENGTH: 246
517 <212> TYPE: PRT
519 <213> ORGANISM: Homo sapiens

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Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.



VERIFICATION SUMMARY

DATE: 12/13/2001

PATENT APPLICATION: US/09/297,040

TIME: 13:54:45

Input Set : A:\2012 0390004 seq list.txt

Output Set: N:\CRF3\12132001\I297040.raw

L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:735 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9